

8x8 Matrix for HDMI with Eight ELR-POL Outputs and Bi-Directional IR



GEF-HDFST-848-8ELR

Route any eight HDMI sources and Bi-Directional IR control to eight different locations up to 330 feet (100 meters) away, using HDBaseT® over a single CAT-5e cable

The GefenPRO 8x8 Matrix for HDMI with 8 ELR-POL Outputs and Bi-Directional IR routes up to eight Hi-Def sources at resolutions up to 1080p Full HD with Deep Color and multi-channel digital audio to any of eight HDTV displays, using FST to speed up HDCP authentication process. Each of the included ELR-POL Receiver units are used to extend HDMI to eight locations, using Gefen ELR (Extra Long Range) and POL (Power Over Line) technologies. ELR is based on HDBaseT® and allows the extension of HDMI using a single CAT-5e cable. POL eliminates the need to externally power the Receiver units. The GefenPRO 8x8 Matrix for HDMI supports 3DTV pass-through and 8 channel digital audio formats such as Dolby® TrueHD and DTS-HD Master Audio™. Each source is accessible at all times from any display location by using the included IR Remote, the RS-232 port, IP control (Telnet or Web GUI), or by using the front-panel push buttons. To take full advantage of the IR capability of the 8x8 Matrix for HDMI w/ 8 ELR-POL Outputs, the following are required: (8) 6-ft mini stereo audio cable (Gefen part no. CAB-AUDIO-6), (16) IR emitters (Gefen part no. EXT-IREMIT), and (8) IR extender modules (Gefen part no. EXT-RMT-EXTIRN). The display can be controlled from the source location using IR commands. 3D content can be displayed when connecting a 3DTV and 3D source.

How It Works

Using HDMI cables, connect the Hi-Def sources to the eight HDMI inputs on the matrix. Connect up to eight HDTV displays to the included Receiver units, also using HDMI cables. Use a single CAT-5e cable, up to 330 feet (100 meters), to connect each of the Receiver units to the matrix.

Connect the included AC power cord to the matrix and connect it to an available electrical outlet. Power to each of the Receiver units is delivered from the matrix. To control each Hi-Def source from the display location, connect an IR Extender to the IR Ext jack on each Receiver unit. Connect an IR Emitter to the corresponding IR Out for each source input on the matrix and place the IR emitter over the IR sensor of the Hi-Def source. Point the IR remote at the IR Extender (at the display location) to control the Hi-Def source. To control the display placed near the Receiver unit, connect the IR Emitter output from an automation device to the corresponding IR Input on the matrix. Connect an IR emitter to the IR Out on each Receiver unit, and attach the IR emitter to the IR sensor of the display.

Gefen FST

Fast Switching Technology (FST) is a Gefen software implementation for HDMI products. FST was created to improve the lengthy HDMI authentication process, based on the HDMI and HDCP specifications. FST allows for connecting/disconnecting or turning any of the HDTV displays on or off without affecting other displays within the audio/video distribution system.

Supported HDMI Features:

- Resolutions up to 1080p Full HD
- HDCP compliant
- 12-bit Deep Color
- x.v. Color
- LPCM 7.1 audio, Dolby® TrueHD, and DTS-HD Master Audio™
- 3DTV pass-through
- Lip Sync pass-through

Features*

- Routes any eight Hi-Def sources to any eight HD displays independently
- Sends and Receives IR signals from any of the 8 remote locations to the matrix
- Includes eight ELR-POL receiver units
- ELR technology allows extension up to 330 feet (100 meters)
- POL feature provides power to each ELR receiver
- HDBaseT® technology
- Gefen FST speeds up the HDCP authentication process
- Fast and Slow FST Modes
- Advanced EDID Management for rapid integration of sources and displays
- Ability to save and recall presets
- Supports DVI sources and displays
- Field-upgradeable firmware via IP or RS-232
- Front Panel Switching
- IR Control of the matrix via front panel sensor and from each Receiver
- Serial (RS-232) control
- IP Control via Web Server and Telnet
- Rack mountable (2U tall, rack ears included)
- Internal power supply with detachable IEC AC cord
- Back panel master power switch

Specifications*

- Maximum Pixel Clock: 225 MHz
- ELR extension range: Up to 330 feet (100 meters)
- Matrix Video Input Connectors: (8) HDMI Type A 19-pin, female, locking
- Matrix Video Output Connectors: (8) ELR-POL RJ45, female
- Receiver ELR-POL Input Connector: (1) RJ45, female
- Receiver Video Output Connector: (1) HDMI Type A 19-pin, female, locking
- Power Indicator (Matrix/Receiver): LED, blue=On, red=Standby
- Lock Indicator (Matrix): LED, blue
- USB Port (Matrix): Mini-B, female (factory use only)
- Ethernet Port (Matrix): (1) RJ45, female, shielded
- RS-232 Port (Matrix): (1) DB-9, female
- IR Input Port (Matrix): (9) 3.5mm mini-stereo jacks
- IR Output Port (Matrix): (9) 3.5mm mini-mono jacks
- IR Extender Port (Receiver): (1) 3.5mm mini-stereo jack
- IR Output Port (Receiver): (1) 3.5mm mini-mono jack
- Power Supply: Internal, 100V to 240V AC, 50/60 Hz, detachable IEC cord
- Power Consumption (Matrix): 200W (max.)
- Operating Temperature: 0 to + 104 °F (0 to + 40 °C)
- Rack mounting requirements (Matrix): Standard 19" rack, 2U high
- Dimensions (Matrix - W x H x D): 17.25" x 3.5" x 12" (440mm x 89mm x 305mm)
- Dimensions (Receivers - W x H x D): 4.4" x 1.1" x 3.35" (110mm x 27mm x 85mm)
- Shipping Weight (1 Matrix and 8 Receivers): 40 lbs. (18 kg)

Gefen, LLC

20600 Nordhoff Street, Chatsworth CA 91311
Tel. (818) 772-9100 (800) 545-6900 Fax (818) 772-9120
www.gefenpro.com

